

Influence of perceived parents' work engagement on university students' work values and self-image at work

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Work attitude is an important topic not only at the workplace but also for the family. It has been discussed beyond the workplace, in relation to individual work-life balance, or its influence on other family members. In this study, our interest is in the influence of the parents' work engagement on the work attitude of university students.

Work engagement is a concept which depicts the positive aspect of individual employees' state of mind, and was developed by Schaufeli, Salanova, González-Romá, and Bakker (2002) based on a framework of personal engagement and disengagement (Kahn, 1990). Many previous studies have focused on how work engagement was maintained and facilitated, illustrated the happy relationships between individuals and work environmental motivational process, and how an individual's inner function makes it easier to access such a process. Mainly, work engagement was predicted by job resources (e.g., Schaufeli & Bakker, 2004), and work engaged employees can create a positive spiral in which job resources and their engaged states reciprocally boost each other (Llorens, Schaufeli, Bakker, & Salanova, 2007). Self-efficacy can mediate relationships between job resources and work engagement as a personal resource (Hakanen, Perhoniemi, & Toppinen-Tanneran, 2008; Schaufeli & Salanova, 2007; Xanthopoulou, Bakker, Demerouti, & Schaufeli 2007; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009). Moreover, work engagement can also crossover among work teams (Bakker, Emmerik, & Euwema, 2006). Bakker and Xanthopoulou (2009) showed that frequent communications with coworkers increased work engagement. Therefore, work engaged people can be assumed to influence the work attitude of other people positively through interactions.

Meanwhile, crossovers happen even out side of the workplace, namely at home. Work engaged employees obtain resources from their partners at home; such as, for example, work engagement crossover among working couples (Bakker, Demerouti, & Schaufeli, 2005). Work engaged employees might share positive work attitudes with their family

members.

Work attitudes are not just shared between coworkers and between working couples. At home, parents' work attitude influences their children's behavior regarding their careers. The parents' work insecurity can negatively influence their children's academic performance, adjustment at school, self-efficacy and work attitudes such as work motivation, work involvement, and work belief (Barling, Dupre, & Hepburn, 1998; Barling, Zacharatos, & Hepburn, 1999; Flanagan & Eccles, 1993; Lim & Loo, 2003). On the other hand, parents' job satisfaction is related to higher school competence (Stewart & Barling, 1996). This happens because many children turn to their parents to talk about their career plans (Otto, 2000). Some children acquire their knowledge of work through direct observations of their parents at work. Another source of knowledge regarding work comes indirectly or incidentally by overhearing conversations about work (Galinsky, 2000). Ogawa and Tanaka (1979) and Tanaka and Ogawa (1985) demonstrated the existence of occupational inheritance, particularly among professional fathers and their children. Shikanai (2005) proposed that adolescents see their parents as their professional role models. According to the studies, children exchange work resources for work with their parents, adopt their parents' work attitude through direct and indirect communications, and shape their future work attitude for future. Therefore, it is expected that university students' work attitude is influenced to a certain degree by their parents' work engagement.

This study focuses on university students, and aims to examine the relationship between perceived parents' work engagement and university students' work values and self-image at work. As work values and self-image at work represent emphasis and prospects in the workplace differently, those variables should be appropriate to examine university students' work attitude. Because university students find themselves in a phase of career transition, and work values and self-image at work are said to be active indicators of career choice (Morinaga, 1997; Komoda, 2006; Shimizu, Shimotomai, & Kazama, 2005). We are investigating how parents' work engagement direct their children's work attitude by using questionnaire research to examine this.

Method

Participants

A total of 602 university students (228 male, 256 female, 8 unreported responses)

completed a questionnaire between April and May 2009 at a university. Their mean age was 19.8 years ($SD = 1.49$). 15.8 % was in their first year, 40.7 % in their second year, 30.9 % in their third year, and 11.0 % in their fourth year. 47.5 % majored in humanities courses, 26.6 % majored in science courses, 24.1 % majored in interdisciplinary courses, and 1.8 % did not report their major.

Measures

Perception of parents' work engagement. Perceived parents' work engagement was assessed with UWES-J (Japanese version of the Utrecht Work Engagement Scale: Schaufeli, et al., 2002; Shimazu, Schaufeli, Kosugi, Suzuki, Nashiwa, Kato, Sakamoto, Irimajiri, Amano, Hirohata, Goto, & Kitaoka-Higashiguchi, 2008) which includes 9 items that were scored on a 6-point scale. Students were asked to describe their perception of how much their parents were engaged at work.

Work values. Work values was assessed with a scale developed by Morinaga (1994), which included 23 items that were scored on a 5-point scale.

Self-image at work. Self-image at work was assessed with a scale developed by Shimizu, Shimotomai, and Kazama (2002; 2005), which included 87 items that were scored on a 7-point scale.

Results

Factor structures of each scale

Work values scale. After factor analysis was performed separately on males and females (principal factor method, varimax rotation), four factors were extracted for males (Table 1). Rewarding job represented their emphasis to be able to make progress on their work. Job conditions represented their emphasis on rewarding and facilitating work environment. Meaning in society represented their emphasis that their work was worth to supporting others. In-house systems represented their emphasis on flexible work environment. Three factors were extracted for females (Table 2). Work-home life balance represented their emphasis on supportive workplace for which where females do not need to sacrifice family consideration. Recognition for working represented their emphasis to work as an expert. Job conditions represented their emphasis on secure job environments.

Self-image at work. After factor analysis was performed separately on males and

Table 1 Factor analysis of work values: Male

	F1	F2	F3	F4	commonality
F1: Rewarding job ($\alpha = .89$)					
18 To be intellectually stimulated.	.65	.06	.04	.24	.49
1 To continuously build career and gain achievement.	.64	.34	-.06	.09	.53
2 To achieve recognition for work.	.64	.29	.02	.02	.49
4 To have the autonomy to form a job plan and a decide what to do by myself.	.56	.06	.11	.13	.34
19 To have variety in my job.	.50	.01	.18	.16	.30
3 To be recognized as the expert in that job.	.50	.07	.13	-.02	.27
11 Worthwhile job.	.49	.11	.31	.03	.35
12 Big responsibility.	.43	-.03	.31	.04	.28
8 Job that required creativity and originality.	.43	-.06	.34	.08	.30
F2: Job conditions ($\alpha = .82$)					
13 Good wages.	.09	.76	.06	-.07	.59
23 Good employment conditions.	.03	.75	-.03	.27	.64
14 Stable management.	.06	.65	.11	.03	.45
15 Good atmosphere at workplace.	.15	.60	.12	.19	.46
17 Opportunities for promotion.	.31	.58	.21	.21	.49
22 To commute easily.	.01	.48	-.10	.32	.34
F3: Meaning in society ($\alpha = .79$)					
10 To be of assistance to others.	.10	.11	.82	.21	.75
7 To contribute to society through work.	.20	.02	.72	.24	.61
9 To be respected by others.	.29	.27	.54	.09	.45
F4: In-house systems ($\alpha = .72$)					
20 Gender equality.	.16	.11	.24	.72	.61
16 Child-care leave.	.11	.28	.20	.59	.48
21 Chances for trainings.	.30	.23	.21	.46	.39
eigen value	6.00	2.56	1.79	1.26	
contribution ratio (%)	3.04	2.94	2.08	1.56	
accumulate contribution (%)	14.45	28.46	38.37	45.79	

Table 2 Factor analysis of work values: Female

	F1	F2	F3	commonality
F1: Work-home life balance ($\alpha = .78$)				
16 Child-care leave.	.69	.12	.21	.54
15 Good atmosphere at workplace.	.60	.06	.30	.45
20 Gender equality.	.60	.09	.19	.40
21 Chances for trainings.	.56	.12	.22	.38
5 To be able to spend much time with a family.	.52	.11	.10	.30
11 Worthwhile job.	.47	.32	-.07	.33
F2: Recognition for working ($\alpha = .74$)				
6 To be involved in important matter in the organization.	.15	.67	.06	.48
3 To be recognized as the expert in that job.	-.07	.57	.04	.33
12 Big responsibility.	.03	.55	-.02	.30
1 To continuously build career and gain achievement.	.15	.53	.21	.35
8 Job that required creativity and originality.	.09	.51	.10	.27
9 To be respected by others.	.15	.43	.20	.25
2 To achieve recognition for work.	.21	.40	.07	.21
F3: Job conditions ($\alpha = .78$)				
13 Good wages.	-.01	.31	.87	.84
14 Stable management.	.21	.08	.63	.45
22 To commute easily.	.21	.04	.57	.37
23 Good employment conditions.	.38	.08	.53	.44
eigen value	5.17	2.20	1.67	
contribution ratio (%)	2.63	2.57	2.12	
accumulate contribution (%)	13.13	26.00	36.60	

females (principal factor method, varimax rotation), five factors were extracted for males (Table 3). Making the most of oneself represented their image that they would put their energy into their job with the expecting expectation of becoming outstanding among compared to others. Prestige represented their self image of their ability to influence others and enhance their presence through work. Avoidance of troublesome situations represented their image that they would not back themselves into a corner. Hierarchical relationships represented their image that they had to pay attention to positional relationship at workplace. Competitive relationships represented their image that they would be required to produce better performance than others. Four factors were extracted for females (Table 4). Adaptation to work represented their image that they should apply their energy and ability properly into their required job. Superiority of position represented their image that they would work as an expert. Failing to commit to work represented their image that they wanted to avoid interfering situation at work. Hierarchical relationship represented their image that they had to follow positional relationship at workplace.

UWES-J. To confirm the one factor structure, principal component analysis was performed with answered data regarding the work engagement of both mother and father separately (male = 215, female = 173). Using the criterion of an eigenvalue greater than 1.00, one factor emerged that accounted 69.2% to 77.6% in both males and females ($\alpha = .94 \sim .96$). And every component loadings were greater than .74.

Descriptive statistics of each scale were shown in Table 5.

Relation between perceived parents' work engagement, self-image at work and work values

A multiple regression analysis was performed on the data obtained which were answered about mother and father (male = 215, female = 173), in order to examine how the perceived parents' work engagement influenced university students' self-image at work and work values (Table 6). For males, the perceived father's work engagement positively influenced the work value of job conditions ($\beta = .20, p < .05$), and the perceived mother's work engagement positively influenced the work values of rewarding job ($\beta = .17, p < .05$), meaning in society and in-house system ($\beta = .33, p < .01$), and negatively influenced the self-image at work of making the most of oneself ($\beta = -.31, p < .05$) and prestige ($\beta = -.34, p < .01$). For females, the perceived father's work engagement negatively influenced the self-image at work of the hierarchical relationship

Table 3 Factor analysis of self-image at work: Male

	F1	F2	F3	F4	F5	commonality
F1: Making the most of oneself ($\alpha = .94$)						
52 I will be engrossed with my job.	.82	.05	-.11	-.05	.06	.69
78 I will find my work enjoyable.	.81	.10	-.05	.01	-.04	.67
79 I will be able to show my individuality which differentiate myself from others.	.76	.18	-.12	-.10	.08	.64
75 My job will boost my confidence.	.76	.19	-.08	.13	-.04	.63
34 I will be proud of my job.	.74	.19	-.09	.02	-.11	.61
56 I will be energetic everyday.	.74	.14	-.01	.11	-.12	.60
28 I will be able to express myself through my job.	.73	.26	-.15	-.07	-.02	.62
36 I will be absorbed in what I am supposed to do.	.71	.01	-.08	-.11	.11	.53
61 I will find every day worth living.	.69	.15	-.09	.11	.06	.52
27 I will behave positive.	.69	.18	-.09	.03	.04	.52
29 I will be able to go on without being an ordinary person.	.68	.16	-.09	-.28	.18	.61
11 I will feel vigorous.	.65	.21	-.03	.08	.00	.48
70 My responsibility will be well-defined.	.57	.17	.08	.12	-.08	.38
72 My shortcomings will be compensate by others.	.51	.22	.17	.22	.04	.39
20 I will continuously make an effort in my job.	.50	.08	-.27	.20	.16	.40
67 I will be able to show that I am not an ordinary person.	.50	.24	.03	-.34	.29	.51
7 I will be recognized as someone different.	.47	.22	-.08	-.25	.19	.37
5 I will be able to provide what others need.	.42	.32	-.04	.13	-.25	.36
22 I will be able to speak friendly at work.	.41	.26	.14	.05	-.06	.26
F2: Prestige ($\alpha = .92$)						
77 I will attract attention from others.	.36	.70	.03	-.09	.02	.63
43 I will be popular.	.18	.69	.23	-.06	.08	.57
63 I will be respected professionally.	.23	.65	.13	-.05	.15	.52
35 Many people will be aspired by me.	.27	.65	.14	-.11	.02	.53
59 I will be recognised as an important person.	.18	.65	.16	-.09	.25	.55
8 I will be respected by many people.	.35	.64	.12	-.05	-.01	.55
21 I will be praised by others.	.21	.64	.18	.05	-.02	.48
16 I will be recognised for my capability.	.24	.62	.21	.04	.04	.49
51 Many people will place their expectations on me.	.35	.60	.15	.08	-.05	.51
1 I will be envied by others.	.06	.59	.16	.04	.14	.40
23 I will be able to give others reward and penalties.	.06	.56	.12	.09	.18	.37
31 I will be able to make others obey me.	-.05	.53	.10	.00	.20	.33
13 I will be able to take leadership role in my job.	.37	.51	-.04	.10	.01	.41
71 I will be able to assign work to others.	.20	.45	.06	.09	.24	.31
45 Even at work, others will find me approachable.	.35	.42	.33	.10	-.16	.45
F3: Avoidance of troublesome situations ($\alpha = .89$)						
37 I will be able to avoid making enemies.	-.11	.25	.72	.00	-.12	.61
46 My responsibility will not be heavy.	-.21	.07	.66	-.01	.20	.52
26 I will not have conflicts with others.	-.07	.24	.65	-.03	-.04	.49
10 I will not arouse hostility from others.	.00	.13	.64	.09	-.18	.47
66 I will be only required responsibility for my part.	-.22	.03	.63	.09	.22	.50
14 I will be able to perform my job by following directions from my superiority.	-.22	.00	.61	.24	.09	.49
44 I will not feel insecure about my job.	.05	.30	.60	-.01	.00	.45
68 I will not be tied to my job.	-.01	.14	.57	-.29	.11	.44
9 I will not be criticized by others easily.	.01	.21	.54	-.01	-.03	.33
50 I will feel relaxed as I will not need to take other's feelings consideration.	-.07	.17	.53	-.28	.26	.46
76 I will not need to interact with people whom I do not like.	-.07	.26	.53	-.35	.19	.50
74 I will be able to keep my distance from fierce competition.	-.06	.17	.51	-.19	-.24	.38
47 I will be able to show that I am not eccentric.	-.17	.04	.46	.23	.06	.30
4 I will not need to take responsibility alone for my work.	-.05	-.02	.44	-.02	.06	.20
25 I will not do work which I am ashamed of.	.18	.17	.42	.14	.14	.28
53 I will be able to treat everyone equally at work.	.39	.12	.42	-.05	.09	.35
F4: Hierarchical relationships ($\alpha = .63$)						
39 I will be required to be sensitive to my superior's requirements.	.17	-.02	-.01	.74	.09	.58
32 I will have to be conscious of hierarchical relationships in the workplace.	-.12	.07	.08	.58	.20	.40
69 I will not have to gauge my superior's thoughts from his expressions.	.29	.22	.27	.57	.03	.53
33 I will be required to keep pace with people whom I am working with.	.16	.01	-.01	.56	.12	.36
17 Hierarchical relationship will be strict at the workplace.	-.08	.04	.05	.53	.18	.33
64 I will have to obey other's direction.	.01	-.12	.03	.46	.11	.23
6 I will be required me to carry out my job duty properly.	.32	.18	.01	.43	-.17	.35
38 At the workplace, the division between the competent and incompetent will be obvious.	.19	.19	-.01	.42	.34	.36
F5: Competitive relationships ($\alpha = .72$)						
41 Winning or losing will be clear-cut.	.08	.17	-.01	.26	.59	.45
2 I will be able to form competitive relationship at work.	.06	.22	-.04	.14	.55	.37
58 To win at work will be good for myself more than anything else.	.06	.23	.10	.04	.53	.36
40 I will be able to get a workplace which creates a sense of tension through competitions.	.37	.16	-.04	.31	.48	.49
73 I will be able to distinguish who is on my side.	-.08	.24	.11	.19	.46	.33
62 I will be able to keep relationships business-like.	-.08	-.08	.20	-.01	.41	.22
eigen value	14.90	8.67	4.79	3.57	2.78	
contribution ratio (%)	14.17	9.41	9.12	5.43	3.83	
accumulate contribution (%)	14.17	23.58	32.70	28.14	41.97	

Table 4 Factor analysis of self-image at work: Female

	F1	F2	F3	F4	commonality
F1: Adaptation to work ($\alpha = .92$)					
78 I will find my work enjoyable.	.75	.12	-.04	-.06	.58
75 My job will boost my confidence.	.75	.21	.03	-.04	.61
34 I will be proud of my job.	.74	.15	-.06	-.04	.57
56 I will be energetic everyday.	.70	.06	-.06	-.05	.50
52 I will be engrossed with my job.	.69	.14	-.09	.03	.50
27 I will behave positive.	.66	.18	-.10	-.06	.47
70 My responsibility will be well-defined.	.64	.13	.00	.17	.46
28 I will be able to express myself through my job.	.62	.25	-.03	-.33	.55
36 I will be able to absorb in what to do.	.61	.12	.00	.01	.38
11 I will feel vigorous.	.60	.10	-.12	-.20	.43
5 I will be able to provide what others need.	.58	.05	.00	.07	.35
22 I will be able to speak friendly at work.	.54	.16	.10	-.26	.40
24 I will be of assistance to others at work.	.53	.03	.03	-.02	.29
12 I will be able to perform my job duty with confidence.	.53	.26	.08	-.14	.38
72 My shortcomings will be compensate by others.	.53	.04	.00	.14	.30
20 I will continuously make an effort in my job.	.53	.00	-.35	.09	.41
6 Many people will require me to carry out my job duty adequately.	.53	.04	-.18	.30	.40
48 I will share the same goal all the time in a working relationship.	.50	.01	.15	.09	.28
45 Even at work, others will find me approachable.	.50	.13	.27	-.25	.40
53 I will be able to treat everyone equally at work.	.47	.21	.34	-.20	.42
80 I will be required to cooperate with others for work.	.42	-.06	.04	.33	.29
F2: Superiority of position ($\alpha = .91$)					
59 I will be recognised as an important person.	.10	.70	.27	.02	.57
63 I will be respected professionally.	.22	.65	.29	.04	.55
40 I will be able to get a workplace which which creates a sense of tension through competitions.	.15	.63	-.10	.30	.51
71 I will be able to assign work to others.	.14	.63	.05	.08	.42
58 To win at work will be good for myself more than anything else.	-.11	.62	.21	.05	.45
77 I will attract attention from others.	.39	.61	.15	-.16	.57
41 Winning or losing will be clear-cut.	-.10	.60	.01	.25	.44
2 I will be able to form competitive relationship at work.	.07	.58	-.01	.06	.34
16 I will be recognised for my capability.	.40	.55	.14	-.14	.51
31 I will be able to make others obey me.	.06	.55	.11	-.10	.32
8 I will be respected by many people.	.36	.54	.14	-.14	.47
67 I will be able to show that I am not an ordinary person.	.39	.54	.13	-.20	.50
73 I will be able to distinguish who is on my side.	-.21	.53	.01	.35	.46
54 I will be able to put myself in a competitive relationship.	.28	.52	-.08	-.02	.36
7 I will be recognized as someone different.	.25	.52	.01	-.34	.45
1 I will be envied by others.	.31	.48	.10	-.10	.35
23 I will be able to give others reward and penalties.	.10	.45	.10	.07	.23
F3: Failing to commit to work ($\alpha = .89$)					
37 I will be able to avoid making enemies.	-.02	-.01	.79	-.04	.62
26 I will not have conflicts with others.	-.06	.09	.70	-.03	.51
10 I will not arouse hostility from others.	.11	-.03	.68	-.08	.49
66 I will be only required responsibility for my part.	-.16	.04	.61	.11	.42
46 My responsibility will not be heavy.	-.21	.15	.61	-.19	.47
74 I will be able to keep my distance from fierce competition.	.24	-.11	.57	-.16	.41
65 I will be able to keep my private time.	.16	.04	.54	.09	.32
18 I will not make myself become a work-oriented person.	.15	.24	.52	-.14	.29
44 I will not feel insecure about my job.	.03	-.12	.52	-.03	.37
9 I will not be criticized by others easily.	.13	.11	.52	-.01	.30
55 I will be relieved to work in a place with many co-workers.	.21	.14	.51	.09	.33
50 I will feel relaxed as I will not need to take other's feelings consideration.	-.06	.25	.49	-.20	.35
14 I will be able to perform my job by following directions from my superiority.	-.36	.15	.48	.15	.40
68 I will not be tied to my job.	.07	.22	.47	-.24	.33
47 I will be able to show that I am not eccentric.	-.08	.03	.45	.20	.25
4 I will not need to take responsibility alone for my work.	-.10	.12	.41	-.05	.20
19 I will not need to be intimate in business line.	-.16	.00	.41	.14	.21
F4: Hierarchical relationship ($\alpha = .76$)					
39 I will be required to be sensitive to my superior's requirements.	.14	-.03	-.11	.64	.44
17 Hierarchical relationship will be strict at the workplace.	-.01	.20	-.04	.60	.40
64 I will have to obey other's direction.	-.11	-.07	.04	.58	.36
38 At the workplace, the division between the competent and incompetent will be obvious.	.02	.27	.13	.55	.39
32 I will have to be conscious of hierarchical relationships in the workplace.	-.21	.25	-.10	.54	.40
33 I will be required to keep pace with people whom I am working with.	.32	-.11	-.06	.53	.40
eigen value	13.08	7.95	5.60	3.98	
contribution ratio (%)	10.50	7.04	6.90	4.25	
accumulate contribution (%)	13.96	23.73	33.31	29.22	

Table 5 Mean and Standard deviation of each scale

Male	<i>M</i>	<i>SD</i>	Female	<i>M</i>	<i>SD</i>
Work values			Work values		
Rewarding job	3.90	.60	Work-home life balance	4.22	.54
Job conditions	3.94	.72	Recognition for working	3.71	.60
Meaning in society	3.85	.92	Job conditions	3.97	.67
In-house systems	3.57	.86			
Self-image at work			Self-image at work		
Making the most of oneself	2.96	.86	Adaptation to work	3.13	.75
Prestige	4.09	.94	Superiority of position	4.70	.76
Avoidance of troublesome situations	4.52	.90	Failing to commit to work	4.48	.88
Hierarchical relationships	3.56	.75	Hierarchical relationship	3.64	.87
Competitive relationships	4.15	.93			
Work engagement of parents			Work engagements of parents		
Father's	3.38	1.44	Father's	3.57	1.54
Mother's	3.31	1.42	Mother's	3.50	1.28

Table 6 Regression of perceived parents' work engagement on work values and self-image at work

Male	Work values				Self-image at work				
	Rewarding job	Job conditions	Meaning in society	In-house system	Making the most of oneself	Prestige	Avoidance of troublesome situations	Hierarchical relationships	Competitive relationships
Perceived work engagement of	β	β	β	β	β	β	β	β	β
Father	.03	.20 *	-.06	-.08	.06	-.11	-.08	.01	-.13
Mother	.17 *	.02	.33 **	.20 *	-.31 *	-.34 **	-.04	-.10	-.02
R^2	.04	.05	.09	.03	.08	.17	.01	.01	.02
Female	Work values			Self-image at work					
	Work-home life balance	Recognition for working	Job conditions	Adaptation to work	Failing to commit to work	Superiority of position	Hierarchical relationship		
Perceived work engagement of	β	β	β	β	β	β	β		
Father	.06	-.01	-.02	-.08	-.07	-.01	-.18 *		
Mother	.06	.09	.05	-.13	-.07	-.12	.09		
R^2	.10	.01	.00	.03	.01	.01	.03		

* $p < .05$, ** $p < .01$ ($\beta = -.18, p < .05$).

Discussion

This study attempted to investigate how the perceived parents' work engagement influences university students' work values and self-image at work.

From the results of the factor structures of "work values" and "self-image at work", we found that in terms of work attitude, males were oriented to be cultivated their work potential and attained social prestige, and expected they could face challenges by improving their abilities without experiencing situations that diminished their motivation. On the other hand, females were oriented to attain recognition for working and spending private time out of work, and expected to adapt to work but not to devote their life to

Influence of perceived parents' work engagement on university students' work values and self-image at work work.

The perceived parents' work engagement influenced the work attitude of their children. Intriguingly, different influence patterns for the father and the mother were found between males and females. This result is consistent with previous studies which insisted that both parents influenced both male and female children through direct interactions (Li & Kerpelman, 2007).

For males, while father's work engagement turned their attention to practical aspects of business such as job conditions, mother's work engagement helped to develop ideals of working, such as rewarding jobs, meaning in society, and in-house system, and inhibited making them most of oneself, and prestige. Mothers, for male adolescents, had an indirect and specific force in building their values (Simpson, 2003). In such cases, males would feel concern regarding their future prospects. Avoidance of troublesome situations, hierarchical relationships, and competitive relationships showed no relation to the parents' work engagement. It could be understood that those are unavoidable hardships while working, and cannot be traced back specifically to the parents.

For females, only father's work engagement inhibited hierarchical relationships. This could mean that females try to distance themselves even from conventional work situations. Several studies indicated that parental support for female career development was absorbed in a different way by females than by males. Matsuda and Maeda (2007) reported that parents' counseling and support had no relationship with female career choice. Hiraishi, Kuze, Ono, and Nagamine (1999) reported that female students were likely to talk about their information/validation requests to their mothers during a discussion more than males with their mothers. Li & Kerpelman (2007) showed that mother-daughter discussion reduced the daughter's distress but discussion with their fathers did not and emphasized the importance of emotional closeness with their parents. Female adolescents might be less expected to absorb or confront differences with their parents' perspectives. Therefore, there might appear a less significant relationship between perceived parents' work engagement and female work attitude.

By considering university students' emphasis and prospects of working, we suggest the possibility that work engaged parents influence the future work attitude of their offspring, in particular for males. Males are considered to have emulated their work engaged mothers in a certain way, and that resulted in an enhanced sense of work values. However, at the same time, they underestimated their own future performance. It can be assumed that, though the parents' positive work attitude stimulates males'

career aspirations, it leads the males to feel too pressured and nervous to live according to their values.

One limitation of this study is that it does not examine whether the students' report of their parents' work engagement and the parents' self-report of their work engagement was the same or not. Secondly, we did not pay attention to family situations such as parent-child relationships, parental income, or employment status, and examined only double income households. Those limitations should be examined in future studies to consider the process of accepting parents' work attitude, to explore further influence of work engaged parents.

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